

Title (en)  
Extreme ultraviolet light source device

Title (de)  
Extremultraviolette Lichtquellenvorrichtung

Title (fr)  
Dispositif de source lumineuse à rayonnement ultraviolet extrême

Publication  
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Application  
**EP 09015807 A 20091221**

Priority  
JP 2008329570 A 20081225

Abstract (en)  
[origin: EP2203033A2] The invention relates to an extreme ultraviolet light source device, comprising a pair of discharge electrodes (2a, 2b, 52a, 52b) arranged spaced apart from each other; a pulsed power supply means (3, 53) supplying pulsed power to said discharge electrodes (2a, 2b); a raw material supply means (7) adapted for supplying raw material (M) for generating extreme ultraviolet radiation onto said discharge electrodes (2a, 2b, 52a, 52b); an energy beam emitting means (10, 60) adapted for radiating an energy beam (LB2) to the raw material (M) on said discharge electrodes (2a, 2b, 52a, 52b) to gasify said raw material (M); a means (11, 61, 85, 95, 105) for forming a depression (MA) in the raw material (M) supplied onto said discharge electrodes (2a, 2b, 52a, 52b); and a controller (6, 56). Said controller (6, 56) is adapted to control the depression forming means (11, 61, 85, 95, 105) such that it forms a depression (MA) in the raw material (M) supplied onto the discharge electrodes (2a, 2b, 52a, 52b) before the voltage between the electrodes (2a, 2b, 52a, 52b) increases by means of the supply of pulsed power to the discharge electrodes (2a, 2b, 52a, 52b) by said pulsed power supply means (3, 53), and before the energy beam (LB2) is radiated to the raw material (M) on the electrodes (2a, 2b, 52a, 52b) by said energy beam emitting means (10, 60). The invention also relates to a process for generating EUV radiation.

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